KENTUCKY INFLUENZA PANDEMIC RESPONSE PLAN
COMMUNITY CONTAINMENT SUPPLEMENT VII

Community Containment

I. RATIONALE / OVERVIEW

The objective of this supplement is to provide guidance on the most effective combinations of pharmaceutical and nonpharmaceutical interventions to reduce the risk of transmission of novel influenza A viruses, particularly subtype H5N1 (a causative agent of avian influenza) that may cause an influenza pandemic. The supplement is divided into three major areas: Community Disease Containment, Prevention and Managing Travel-Related Risk of Disease Transmission and Legal Authority for Public Health Emergencies. The first two major areas provide guidance for the state and local health departments depending on the stages of the pandemic. This supplement contains appendices that address vaccine and antiviral prioritization, travel industry guidelines, protocols for international flights, isolation and quarantine information, school notification-concerning communicable disease and interim guidance from the CDC on nonpharmaceutical interventions.

The Kentucky Department for Public Health will implement recommendations from the "Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States – Early, Targeted, Layered Use of Nonpharmaceutical Interventions" (Appendix 6) before explosive growth of an epidemic. This will mitigate the effects of an influenza pandemic on the population of Kentucky. KDPH will execute the pandemic mitigation interventions described based upon the pandemic severity index and other guidance received by the CDC.

There are several local health departments (LHDs) throughout Kentucky that are working with local government, law enforcement, and emergency medical planning coalitions to develop local isolation and quarantine (I&Q) plans. The Kentucky Department for Public Health (KDPH) has been involved with these initiatives and is in the planning and development stages of a statewide I&Q plan that will align with local plans. Kentucky's I&Q planning efforts incorporate the unique needs and circumstances of vulnerable populations such as limited English proficiency populations, homeless persons, persons with special medical needs, etc. KDPH will work closely with LHDs, first responders, health care providers, health care facilities, etc. to monitor isolated/quarantined persons and ensure their basic needs are met. Necessities such as clothing, food, and shelter will be addressed through coordination with community–based organizations and LHDs. To ensure the ongoing provision of basic utilities such as water, electricity, garbage collection, heating/air conditioning, etc., the KDPH and LHDs will coordinate with community–based organizations, regional jurisdictions, and/or public utilities.

Effective public communication programs will be essential to achieving compliance with all disease control strategies and to maintain the credibility of government and health officials. Pre–event radio and television public service announcements have been developed for emergency broadcasting discussing necessary steps for the public to follow during a pandemic influenza outbreak in Kentucky. Communication to isolated/quarantined persons will be accomplished through utilization of radio, television,

printed media, door–to–door messages (when necessary) and the Kentucky Outreach Information Network. Access to telephone services will be coordinated for isolated/quarantined persons when necessary. In addition, Emergency Public Information and Risk Communication (EPIRC) will continue to closely communicate with Kentucky Home Health Association, Kentucky Hospital Association, and the Kentucky Medical Association for strategies to coordinate health and medical services for those isolated/quarantined.

II. GUIDELINES FOR COMMUNITY DISEASE CONTAINMENT:

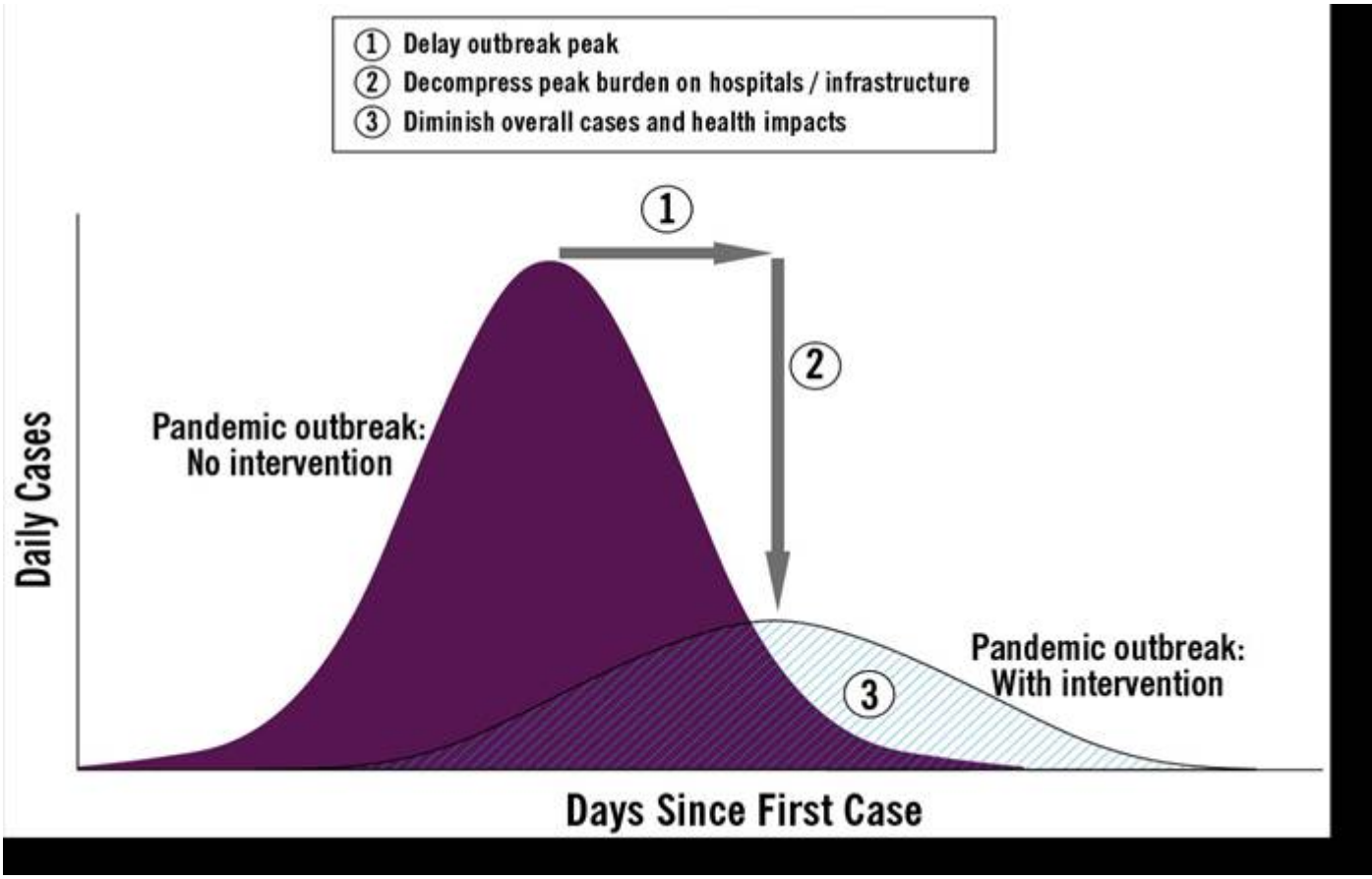
The overarching public health imperative is to reduce morbidity and mortality in a pandemic. The primary strategies for combating influenza are:

1. Vaccination
2. Treatment of infected individuals and prophylaxis of exposed individuals with influenza antiviral medications
3. Implementation of infection control and social distancing measures.

Because it is highly unlikely that a vaccine would be available at the start of a pandemic and the fact that vaccine and antivirals are likely to be in short supply, nonpharmaceutical interventions will be the best countermeasure. The goals of community mitigation are listed below and summarized in Figure 1:

1. Delay outbreak peak
2. Decompress peak burden on hospitals/infrastructure
3. Diminish overall cases and health impacts

Figure 1. Goals of Community Mitigation

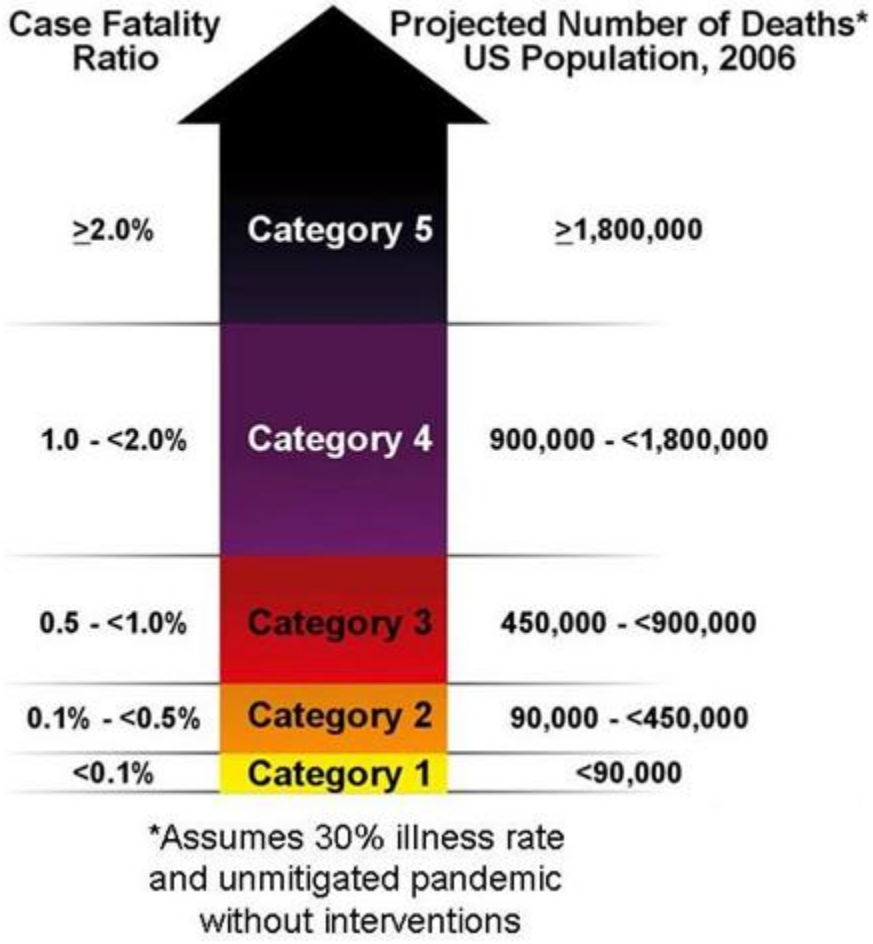


Based on research done by the CDC, community containment is based upon early, targeted, layered mitigation strategies involving multiple partially effective nonpharmaceutical measures initiated early and maintained consistently during an epidemic wave. Decisions about what interventions should be used during a pandemic should be based on the severity of the event, its impact on specific subpopulations, the expected benefits of the intervention, the feasibility of success in modern society, the direct and indirect costs, and the consequences of critical infrastructure, healthcare delivery and society. Some interventions such as prolonged dismissal of students from school are not necessary during a less severe pandemic. The Pandemic Severity Index is a tool created by the CDC for pre-pandemic planning efforts based primarily on case fatality ratio. Pandemic severity is described within five discrete categories of increasing severity (Category 1 to Category 5). Figure 2 below provides categorization of pandemic severity by epidemiological characteristics:

Figure 2. Pandemic Severity Index by Epidemiological Characteristics

Characteristics	Pandemic Severity Index				
	Category 1	Category 2	Category 3	Category 4	Category 5
Case Fatality Ratio (percentage)	<0.1	0.1 - <0.5	0.5 - <1.0	1.0 - <2.0	≥ 2.0
Excess Death Rate (per 100,000)	<30	30 - <150	150 - <300	300 - <600	≥600
Illness Rate (percentage of the population)	20 - 40	20 - 40	20 - 40	20 - 40	20 - 40
Potential Number of Deaths (based on 2006 U.S. population)	<90,000	90,000-<450,000	450,000-<900,000	900,000-<1.8 million	≥1.8 million
20th Century U.S. Experience	Seasonal Influenza (Illness rate 5-20%)	1957, 1968 Pandemic	None	None	1918 Pandemic

Figure 3. Pandemic Severity Index



A. Nonpharmaceutical Interventions

Community containment is based upon early, targeted, layered mitigation strategies involving multiple partially effective nonpharmaceutical measures initiated early and maintained consistently during an epidemic wave. These interventions are based on severity index and include:

1. Isolation and treatment (as appropriate) with influenza antiviral medications of all persons with confirmed or probable pandemic influenza. Isolation may occur in the home or healthcare setting, depending on the severity of the individual's illness and/or the current capacity of the healthcare infrastructure.

2. Voluntary home quarantine of members of households with confirmed or probable influenza case(s) and consideration of combining this intervention with

the prophylactic use of antiviral medications, providing sufficient quantities of effective medications exist and that a feasible means of distributing them is in place.

3. Dismissal of students from schools (including public and private schools as well as colleges and universities) and school-based activities and closure of childcare programs, coupled with protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing.

4. Use of social distancing measures to reduce contact between adults in the community and workplace, including, for example, cancellation of large public gatherings and alteration of workplace environments and schedules to decrease social density and preserve a healthy workplace to the greatest extent possible without disrupting essential services. Enable institution of workplace leave policies that align incentives and facilitate adherence with the nonpharmaceutical interventions (NPIs) outlined above.

Recommendations for these nonpharmaceutical measures are summarized below.

Figure 4. Summary of the Community Mitigation Strategy by Pandemic Severity

	Pandemic Severity Index		
Interventions* by Setting	**1**	**2 and 3**	**4 and 5**
Home			
Voluntary isolation of ill at home (adults and children); combine with use of antiviral treatment as available and indicated	Recommend†§	Recommend†§	Recommend †§
Voluntary quarantine of household members in homes with ill persons¶ (adults and children); consider combining with antiviral prophylaxis if effective, feasible, and quantities sufficient	Generally not recommended	Consider **	Recommend **
School **Child social distancing**			
-dismissal of students from schools and school based activities, and closure of child care programs	Generally not recommended	Consider: ≤4 weeks††	Recommend: ≤12 weeks§§
-reduce out-of school social contacts and community mixing	Generally not recommended	Consider: ≤4 weeks ††	Recommend: ≤12 weeks§§
Workplace / Community **Adult social distancing**			
-decrease number of social contacts (e.g., encourage teleconferences, alternatives to face-to-face meetings)	Generally not recommended	Consider	Recommend
-increase distance between persons (e.g., reduce density in public transit, workplace)	Generally not recommended	Consider	Recommend
-modify, postpone, or cancel selected public gatherings to promote social distance (e.g., stadium events, theater performances)	Generally not recommended	Consider	Recommend
-modify work place schedules and practices (e.g., telework, staggered shifts)	Generally not recommended	Consider	Recommend

The following interventions are taken from "Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States – Early, Targeted, Layered Use of Nonpharmaceutical Interventions".

Voluntary Isolation of Ill Persons

The goal of this intervention is to reduce transmission by reducing contact between persons who are ill and those who are not. Ill individuals not requiring hospitalization would be requested to remain at home voluntarily for the infectious period, approximately 7-10 days after symptom onset. This would usually be in their homes, but could be in a home of a friend or relative. Voluntary isolation of ill children and adults at home is predicated on the assumption that many ill individuals who are not critically ill can and will need to be cared for in the home. In addition, this intervention may be combined with the use of influenza antiviral medications for treatment (as appropriate), as long as such medications are effective and sufficient in quantity and that feasible plans and protocols for distribution are in place.

Requirements for success include prompt recognition of illness, appropriate use of hygiene and infection control practices in the home setting (specific guidance is forthcoming and will be available on www.pandemicflu.gov); measures to promote voluntary compliance (e.g., timely and effective risk communications); commitment of employers to support the recommendation that ill employees stay home; and support for the financial, social, physical, and mental health needs of patients and caregivers. In addition, ill individuals and their household members need clear, concise information about how to care for an ill individual in the home and when and where to seek medical care. Special consideration should be made for persons who live alone, as many of these individuals may be unable to care for themselves if ill.

Voluntary Quarantine of Household Members of Ill Persons

The goal of this intervention is to reduce community transmission from members of households in which there is a person ill with pandemic influenza. Members of households in which there is an ill person may be at increased risk of becoming infected with a pandemic influenza virus. As determined on the basis of known characteristics of influenza, a significant proportion of these persons may shed virus and present a risk of infecting others in the community despite having asymptomatic or only minimally symptomatic illness that is not recognized as pandemic influenza disease. Thus, members of households with ill individuals may be recommended to stay home for an incubation period, 7 days (voluntary quarantine) following the time of symptom onset in the household member. If other family members become ill during this period, the recommendation is to extend the time of voluntary home quarantine for another incubation period, 7 days from the time that the last family member becomes ill. In addition, consideration may be given to combining this intervention with provision of influenza antiviral medication to persons in quarantine if such medications are effective and sufficient in quantity and if a feasible means of distributing them is in place.

Requirements for success of this intervention include the prompt and accurate identification of an ill person in the household, voluntary compliance with quarantine by household members, commitment of employers to support the recommendation that employees living in a household with an ill individual stay home, the ability to provide needed support to households that are under voluntary quarantine, and guidance for infection control in the home. Additionally, adherence to ethical principals in use of quarantine during pandemics, along with proactive anti-stigma measures should be assured.83, 84

Child Social Distancing

The goal of these interventions is to protect children and to decrease transmission among children in dense classroom and non-school settings and, thus, to decrease introduction into households and the community at large. Social distancing interventions for children include dismissal of students from classrooms and closure of childcare programs, coupled with protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing. Childcare facilities and schools represent an important point of epidemic amplification, while the children themselves, for reasons cited above, are thought to be efficient transmitters of disease in any setting. The common sense desire of parents to protect their children by limiting their contacts with others during a severe pandemic is congruent with public health priorities, and parents should be advised that they could protect their children by reducing their social contacts as much as possible.

However, it is acknowledged that maintaining the strict confinement of children during a pandemic would raise significant problems for many families and may cause psychosocial stress to children and adolescents. These considerations must be weighed against the severity of a given pandemic virus to the community at large and to children in particular. Risk of introduction of an infection into a group and subsequent transmission among group members is directly related to the functional number of individuals in the group. Although the available evidence currently does not permit the specification of a "safe" group size, activities that recreate the typical density and numbers of children in school classrooms are clearly to be avoided. Gatherings of children that are comparable to family-size units may be acceptable and could be important in facilitating social interaction and play behaviors for children and promoting emotional and psychosocial stability.

A recent study of children between the ages of 25 and 36 months found that children in group care with six or more children were 2.2 times as likely to have an upper respiratory tract illness as children reared at home or in small-group care (defined as fewer than six children). If a recommendation for social distancing of children is advised during a pandemic and families must nevertheless group their children for pragmatic reasons, it is recommended that group sizes be held to a minimum and that mixing between such groups be minimized (e.g., children should not move from group to group or have extended social contacts outside the designated group).

Requirements for success of these interventions include consistent implementation among all schools in a region being affected by an outbreak of pandemic influenza, community and parental commitment to keeping children from congregating out of school, alternative options for the education and social interaction of the children, clear legal authorities for decisions to dismiss students from classes and identification of the decision-makers, and support for parents and adolescents who need to stay home from work. Interim recommendations for pre-pandemic planning for this intervention include a three-tiered strategy: 1) no dismissal of students from schools or closure of childcare facilities in a Category 1 pandemic, 2) short-term (up to 4 weeks) dismissal of students and closure of childcare facilities during a Category 2 or Category 3 pandemic, and 3) prolonged (up to 12 weeks) dismissal of students and closure of childcare facilities during a severe influenza pandemic (Category 4 or Category 5). The conceptual thinking behind this recommendation is developed more fully in Section VII, *Duration of Implementation of Nonpharmaceutical Interventions*.

Colleges and universities present unique challenges in terms of pre-pandemic planning because many aspects of student life and activity encompass factors that are common to both the child school environment (e.g., classroom/dormitory density) and the adult sphere (e.g., commuting longer distances for university attendance and participating in activities and behaviors associated with an older student population). Questions remain with regard to the optimal strategy for managing this population during the early stages of an influenza pandemic.

The number of college students in the United States is significant. There are approximately 16.6 million college students attending both 2- and 4-year universities, a large number of whom live away from home. Of the 8.3 million students attending public or private 4-year colleges and universities, less than 20 percent live at home with their parents.

At the onset of a pandemic, many parents may want their children who are attending college or university to return home from school. Immediately following the announcement of an outbreak, colleges and universities should prepare to manage or assist large numbers of students departing school and returning home within a short time span. Where possible, policies should be explored that are aligned with the travel of large numbers of students to reunite with family and the significant motivations behind this behavior. Pre-pandemic planning to identify those students likely to return home and those who may require assistance for imminent travel may allow more effective management of the situation. In addition, planning should be considered for those students who may be unable to return home during a pandemic.

Adult Social Distancing

Social distancing measures for adults include provisions for both workplaces and the community and may play an important role in slowing or limiting community transmission pressure. The goals of workplace measures are to reduce transmission within the workplace and thus into the community at large, to ensure a safe working

environment and promote confidence in the workplace, and to maintain business continuity, especially for critical infrastructure. Workplace measures such as encouragement of telework and other alternatives to in-person meetings may be important in reducing social contacts and the accompanying increased risk of transmission. Similarly, modifications to work schedules, such as staggered shifts, may also reduce transmission risk.

Within the community, the goals of these interventions are to reduce community transmission pressures and thus slow or limit transmission. Cancellation or postponement of large gatherings, such as concerts or theatre showings, may reduce transmission risk. Modifications to mass transit policies/ridership to decrease passenger density may also reduce transmission risk, but such changes may require running additional trains and buses, which may be challenging due to transit employee absenteeism, equipment availability, and the transit authority's financial ability to operate nearly empty train cars or buses.

Requirements for success of these various measures include the commitment of employers to providing options and making changes in work environments to reduce contacts while maintaining operations; whereas, within communities, the support of political and business leaders as well as public support is critical.

B. Triggers for Initiating Use of Nonpharmaceutical Interventions

Identifying the optimal time for initiation of nonpharmaceutical interventions will be challenging as implementing measures prior to a pandemic may result in economic and social hardship and compliance fatigue while implementing measures after extensive spread may limit health benefits. Identification of key personnel, critical resources and processes is very important during a pandemic. Figure 5 below introduces the terms Alert, Standby and Active to reflect key steps in escalation of response action.

Figure 5. Triggers for Implementation of Mitigation Strategies by Pandemic Severity Index and U.S. Government Stages

Pandemic Severity Index	WHO Phase 6, U.S. Government Stage 3*	WHO Phase 6, U.S. Government Stage 4† and First human case in United States	WHO Phase 6, U.S. Government Stage 5§ and First laboratory-confirmed cluster in State or region¶
1	Alert	Standby	Activate
2 and 3	Alert	Standby	Activate
4 and 5	Standby**	Standby/Activate ††	Activate

*Widespread human outbreaks in multiple locations overseas.
†First human case in North America.
§Spread throughout the United States.
¶Recommendations for regional planning acknowledge the tight linkages that may exist between cities and metropolitan areas that are not encompassed within state boundaries.
***Standby* applies. However, *Alert* actions for Category 4 and 5 should occur during WHO Phase 5, which corresponds to U.S. Government Stage 2.
††*Standby/Activate Standby* applies unless the laboratory-confirmed case cluster and community transmission occurs within a given jurisdiction, in which case that jurisdiction should proceed directly to *Activate* community interventions defined in Table 2.

Alert includes notification of critical systems and personnel of impending activation, Standby includes initiation of decision-making processes for imminent activation, including mobilization of resources and personnel, and Activate refers to implementation of the specified pandemic mitigation measures. See Appendix 7 for specific triggers for community containment interventions.

C. Duration of Implementation of Nonpharmaceutical Interventions

The total duration for intervention measures will depend on the severity of the pandemic and the duration of the pandemic wave in the community. (The average pandemic wave is about 6-8 weeks). Monitoring of excess mortality, case fatality rations or other surrogate markers over time will be important for determining the optimal duration. The table below provides guidance on the duration of dismissal of students:

- No dismissal of students from schools or closure of childcare facilities in a Category 1 pandemic

- Short-term (up to 4 weeks) dismissal of students and closure of childcare facilities during a Category 2 or Category 3 pandemic
- Prolonged (up to 12 weeks) dismissal of students and closure of childcare facilities during a severe influenza pandemic (Category 4 or Category 5 pandemic)

D. Planning to Minimize Consequences of Community Mitigation Strategy

The major areas of concern derive from the recommendation to dismiss children from school and closure of childcare programs. The concerns include 1) the economic impact to families; 2) the potential disruption to all employers, including businesses and governmental agencies; 3) access to essential goods and services; and 4) the disruption of school-related services (e.g., school meal programs). Other interventions, such as home isolation and voluntary home quarantine of members of households with ill persons, would also contribute to increased absenteeism from work and affect both business operations and employees. These issues are of particular concern for vulnerable populations who may be disproportionately impacted.

Solutions or strategies for minimizing the impact of dismissal of students from school and closure of childcare programs and workplace absenteeism are summarized below: 1) employing child-minding strategies to permit continued employment; 2) employing flexible work arrangements to allow persons who are minding children or in quarantine to continue to work; 3) minimizing the impact on household income through income replacement; and 4) ensuring job security.

Communities and families with school-age children who rely on school meal programs should anticipate and plan as best they can for a disruption of these services and school meal programs for up to 12 weeks. Local government and faith-based and community leaders are being encouraged to work closely with nutrition program administrators at the local, State, and Federal level to:

- Develop plans to address community nutrition assistance needs during a pandemic
- Identify nutrition program adaptations needed to respond to social distancing, voluntary quarantines, and possible disruption of the normal food supply
- Address challenges related to the supply and delivery of food through commercial markets
- Identify current program flexibilities/authorities and determine if others are needed

III. GENERAL GUIDELINES FOR COMMUNITY DISEASE CONTAINMENT AND PREVENTION — INTERPANDEMIC AND PANDEMIC ALERT PERIODS:

A. Department for Public Health Responsibilities

A novel influenza A virus has been detected in animals but not in humans. During these phases, the risk of human infection with a novel influenza A virus strain is extremely low but would become much higher in persons living in or traveling to affected areas.

Notify Local Health Departments through Kentucky Health Alert Network as "heads up" warning and encourage public information the following guidelines to reduce the transmission of disease:

- Hand washing: wash hands after touching blood, bodily fluids, secretions, excretions, and contaminated items, whether or not gloves are worn. Wash hands immediately after gloves are removed, between patients' contacts, and when otherwise indicated to avoid transfer of microorganisms to other patients or environments.
- Use plain non-antimicrobial soap for routine hand washing
- Wash hands with either a non-antimicrobial soap and water or an antimicrobial soap and water when hands are visibly soiled.
- When hands are not visibly soiled, use an **alcohol-based hand rub** or waterless antiseptic agent when soap and water are not immediately available.
- Use respiratory hygiene/ cough etiquette

Control measures for persons with symptoms of a respiratory infection; implement at first point of encounter (e.g. triage/ reception areas within a healthcare setting).

Cover the mouth/nose when sneezing/coughing; use tissues and dispose in no-touch receptacles; perform hand hygiene after contact with respiratory secretions; wear a mask (procedure or surgical) if tolerated; sit or stand as far away as possible (more than 3 feet) from persons who are ill.

1. Personal Protective Equipment (PPE):

- **Gloves**: Wear gloves (clean, non-sterile gloves are adequate) when touching blood, body fluids, secretions, excretions, and contaminated items. Put on clean gloves just before touching mucous membranes and non-intact skin. Change gloves between tasks and procedures on the same patient after contact with material that may contain a high concentration of microorganisms. Decontaminate hands after removing gloves.
- **Gown**: Wear a gown during procedures and patient care activities when contact of clothing or exposed skin with blood or body fluids, secretions, and excretions is anticipated.
- **Face/ eye protection** (e.g. surgical or procedure mask and goggles or face shield). Use face/ eye protection during procedures and patient care activities likely to generate splashes or sprays of blood, body fluids, secretions, or excretions

2. Safe Work Practices:

- Avoid touching eyes, nose, mouth or exposed skin with contaminated hands (gloved or ungloved).
- Avoid touching surfaces that are not directly related to patient care (e.g. door knobs, keys, light switches) with contaminated gloves and other PPE.

3. Environmental cleaning and disinfection:

- Use EPA-registered hospital detergent-disinfectant; follow standard facility procedures for cleaning and disinfection of environmental surfaces; emphasize cleaning/disinfection of frequently touched surfaces (e.g. bed rails, phones, lavatory surfaces).
- Disposal of solid waste: Contain and dispose of solid waste (regulated medical and non-medical) in accordance with facility procedures and local or state regulations; wear gloves when handling waste; wear gloves when handling waste containers; perform hand hygiene after waste disposal.
- Soiled patient care equipment: Handle in a manner that prevents transfer of microorganisms to oneself, others, and environmental surfaces; wear gloves if handling visibly contaminated equipment; perform hand hygiene after handling equipment.
- Soiled linen and laundry: Handle in a manner that prevents transfer of microorganisms to oneself, others, and to environmental surfaces; wear gloves (gown if necessary) when handling and transporting soiled linen and laundry; and perform hand hygiene after handling soiled lines and laundry.

B. Local Health Departments Responsibilities:

- Implement guidelines set out by state and local pandemic influenza plan using standard precautions for hand washing techniques, PPE, and reduction of spread of disease.
- Standard precautions using proper hand washing techniques (e.g. wash hands after touching blood, bodily fluids, secretions, excretions, and contaminated items, whether or not gloves are worn. Wash hands immediately after gloves are removed, between patient contacts, tasks, and procedures.)
- Standard procedures followed for reduction of spread of disease through respiratory hygiene/ cough etiquette; covering the mouth/nose when sneezing/coughing; using tissues and dispose in no-touch receptacles; perform hand hygiene after contact with respiratory secretions; wear a mask (procedure or surgical) if necessary.
- Educate general public in ways to reduce the spread of disease; PSA in local newspapers and television; flyers and hand outs for school visits, posters displayed in waiting rooms of LHD describing proper techniques for hand washing, cough/sneeze etiquette.
- Receive and provide vaccine/anti-viral medications direct (probably) from manufacturers for at risk populations using prioritization Tier groups established through state and local pandemic flu plan. (see Appendix A)

III GENERAL GUIDELINES FOR COMMUNITY DISEASE CONTAINMENT AND PREVENTION — PANDEMIC PERIOD:

A. Department for Public Health Responsibilities:

During this period:

- A novel influenza A virus has been detected in humans through sporadic animal to human transmission in an affected area (e.g. direct contact with infected poultry), and few cases of limited, local human-to-human transmission have occurred (small clusters of cases).
- A novel influenza A virus has been detected in humans in larger clusters in an affected area, suggesting that the virus is becoming better adapted to spread among people.
- Human infection with human influenza viruses or other viruses will occur and should still be considered.

KDPH will continue efforts used during earlier periods and:

- Regularly consult updates on case definitions, screening, laboratory testing, and treatment algorithms for pandemic influenza noting if any of the following have occurred within the state:
- Issue medical alerts on Kentucky Health Alert Network (HAN) for medical personnel, public health workers and LHD's
- Through the Division of Communications, (Commissioner and /or Governor's office) provide medical information and background to general public via public service announcements listed on radio, television and specific websites for self isolation / quarantine
- Begin early with first and fewest cases reported to help slow spread of disease. Issue information on guidelines, transmission and spread of virus
- Individuals who are sick, have been exposed, or are caring for an individual who is sick should "self- isolate" or "self quarantine" themselves for a period of ten days until the possibility of transmission has passed
- Suspend communal gatherings, (e.g., ballgames, school, church, shopping malls, and other social functions)
- Limit travel to a minimum thus reducing the possibility of transmission of virus during pandemic period
- Travel to known infected areas should be avoided at all times during pandemic period

B. Local Health Departments will continue efforts used during earlier periods and:

- Implement standard precautions and procedures for reduction and spread of disease
- Encourage respiratory hygiene/ cough etiquette in the community
- Control measures for persons with symptoms of a respiratory infection; implement at first point of encounter (e.g. triage/ reception areas within a healthcare setting).
    - Cover the mouth/nose when sneezing/coughing; use tissues and dispose in no-touch receptacles; perform hand hygiene after contact with respiratory

secretions; wear a mask (procedure or surgical) if tolerated; sit or stand as far away as possible (more than 3 feet) from persons who are ill.

- Hand washing: wash hands after touching blood, bodily fluids, secretions, excretions, and contaminated items, whether or not gloves are worn. Wash hands immediately after gloves are removed, between patients' contacts, and when otherwise indicated to avoid transfer of microorganism to other patients or environments.
- Use plain non-antimicrobial soap for routine hand washing
- Wash hands with either a non-antimicrobial soap and water or an antimicrobial soap and water when hands are visibly soiled.
- When hands are not visibly soiled, use an **alcohol-based hand rub** or waterless antiseptic agent when soap and water are not immediately available.

IV. MANAGING TRAVEL-RELATED RISK OF DISEASE TRANSMISSION INTER-PANDEMIC AND PANDEMIC ALERT PERIOD:

A. Department for Public Heath Responsibilities:

- Provide public health information to LHD for travelers who visit counties where avian or animal influenza strains that can infect humans (e.g., influenza A (H5N1) or human strains with pandemic potential have been reported
- KDPH will work closely with UDSA /APHIS and Kentucky Department of Agriculture to prevent the importation of influenza- infected birds and animals into the United States
- KDPH will work closely with travel industry (airlines, cruise ships, bus lines) to educate them on procedures for identifying and managing arriving ill passengers and to notify KDPH of suspected cases (see appendix B)
- Local Health Department Inter-pandemic and Pandemic Alert Period:
    - Distribute travel health alert notices to general public especially passengers planning to visit affected countries
    - Post travel health alert notices in airports, bus terminals, travel agencies
    - Distribute health alert notices to prominent places of business such as county court houses, public schools, doctor's offices, hospitals, EMS
- Department for Public Health Pandemic Period:
    - Minimize travel-related disease transmission using various containment strategies
    - Suspend social gatherings in areas known to have Influenza A virus (H5N1) (e.g., ballgames, church meetings, concerts, shopping malls)
    - Suspend travel into and from known infected areas having Influenza A virus (H5N1)
    - Post alerts for LHD informing them of areas that are under quarantine due to infection of Influenza A virus (H5N1)
    - Issue travel health precautions and warnings
    - Avoid travel to high risk settings and communities where transmission is occurring
    - Postpone nonessential travel during pandemic period

- Provide guidance on infection control procedures for travel industry, (e.g., airplanes, ships, busses) to separate ill passengers from other passengers and provide ill passenger with a mask or tissues to prevent viral spread via coughing
- Recommend the cancellation of nonessential travel to other countries or areas affected by Influenza A virus (H5N1)
- Isolate ill passengers arriving on domestic flights and quarantine passengers and crew following protocols developed for international flights (see appendix C)
- KDPH will work closely with Governor's office, Kentucky Department of Transportation and state EOC concerning closing mass transit systems (e.g., buses, trains,)
- KDPH will work closely with Governor's office, Kentucky Department of Transportation and state EOC concerning closing interstate bus and train routes

B. Local Health Department Responsibilities:

- Stress proper hand washing techniques especially when frequenting public places, (e.g., restaurants, churches, schools, bus and airport terminals
- During periods of increased respiratory infection in the community, persons who are coughing should wear either a procedure mask or a surgical mask to contain respiratory secretions or be encouraged to sit as far away as possible (at least 3 feet) from others in common waiting areas
- LHD should notify local authorities of individuals who have traveled to known areas of infection and have possibly been exposed to influenza A virus and who are under self-isolation/ quarantine. Each quarantined person should receive a preliminary medical assessment and should be interviewed to ascertain their travel and exposure histories.
- LHD should quarantine travel contacts (i.e., passengers, crew, response workers) only when there is a high probability that the ill passenger is infected with a novel influenza strain that is transmitted between people. If a decision is made to initiate quarantine, persons who cannot be quarantined at home should be housed in a pre-designated temporary care facility until the diagnosis of the ill passenger is confirmed or disproved (see Appendix D)
- LHD Regional Epidemiologist or infection control nurses should monitor "hot zones" and outbreaks of individuals with influenza like symptoms until definitive diagnosis is confirmed
- Minimize travel-related disease transmission using containment strategies and then evaluate the need to implement or terminate travel-related containment measures as the pandemic evolves

V. LEGAL AUTHORITY FOR PUBLIC HEALTH EMERGENCIES:

A. KY Revised Statutes

- KRS 39A. 100(1), Kentucky State Law states; (1) In the event of the occurrence or threatened or impending occurrence of any of the situations or events contemplated by KRS 39A.010 (et seq.), the Governor may declare, in writing, that a state of emergency exists. Conditions enumerated in KRS 30A.010 include "threats to public safety and health"
- KRS 214.020 Cabinet to adopt regulations and take other action to prevent spread of disease. When the Cabinet for Health Services believes that there is a probability that any infectious or contagious disease will invade this state, it shall take such action and adopt and enforce such rules and regulations as it deems efficient in preventing the introduction or spread of such infectious or contagious disease or diseases within the state, and to accomplish these objects shall establish and strictly maintain quarantine and isolation at such places as it deems proper.
- 902 KAR 2:050 Control procedures; application. Relates to: KRS 211.180. 214.020 Statutory Authority: KRS 195.040, 211.090 Necessity, Function, and Conformity: KRS 211.180 mandates the Cabinet for Human Resources to implement a statewide program for the detection, prevention and control of communicable diseases. This regulation insures the application of control procedures necessary to prevent transmission of communicable diseases after the sources of infection are identified
- KRS 158-160 Notification to school by parent or guardian of child's medical condition threatening school safety – Exclusion of child with communicable disease from school – Closing of school during epidemic.

Appendix 1: Prioritization Tier Groups:

Vaccine

- Tier 1 A: vaccine and antiviral manufacturers and others essential to manufacturing and critical support; medical workers and public health workers who are involved in direct patient contact;
- Tier 1 B: persons> 65 years with 1 or more influenza high-risk conditions and residents in long term care facilities; persons 6 months to 64 years with 2 or more influenza high risk conditions; persons 6 months or older with history of hospitalization for pneumonia or influenza or other influenza high risk condition in the past year
- Tier C: Pregnant women; household contacts of severely immunocompromised persons who would not be vaccinated due to likely poor response to vaccine; household contacts of children < 6 months olds
- Tier D: Public health emergency response workers critical to pandemic response; key government leaders
- Tier 2 A: Healthy 65 years and older; 6 months to 64 years with 1 high risk condition; 6- 23 months old, healthy
- Tier 2 B: other public health emergency responders; public safety workers including police, fire, 911 dispatchers, and correctional facility staff; utility workers essential for maintenance of power, water, and sewage system functioning; transportation workers transporting fuel, water, food, and medical supplies; telecommunications/ IT for essential network operations and maintenance
- Tier 3: Other key government health decision makers; funeral directors/ embalmers
- Tier 4: Healthy person 2-64 years not included in the above categories

Anti-viral Prioritization

- Patients admitted to hospital
- Health care workers (HCW) with direct patient contact and emergency medical services (EMS) providers
- Highest risk outpatients -immunocompromised persons and pregnant women
- Pandemic health responders (public health, vaccinators, vaccine and antiviral manufacturers), public safety (police, fire, corrections), and government decision-makers
- Increased risk outpatients –young children 12-23 months old, persons > 65 years old, and persons with underlying medical conditions
- Outbreak response in nursing homes and other residential settings
- HCW in emergency departments, intensive care units, dialysis centers and EMS providers
- Pandemic societal responders (e.g., critical infrastructure groups as defined in the vaccine priorities) and HCW without direct patient contact
- Other outpatients
- Highest risk outpatients
- Other HCW with direct patient contact

Appendix 2: Travel Industry:

Interim Guidance for Airline Flight Crews and Persons Meeting Passengers Arriving from areas with Avian Influenza; Updated March 13 http://www.cdc.gov/travel/other/avian_flu_ig_airlines_ 021804.htm

Interim Guidance for Airline Cleaning Crew, Maintenance Crew, and Baggage/Package and Cargo Handlers for Airlines Returning from Areas Affected by Avian Influenza A (H5N1)- Updated March 13 http://www.cdc.gov/travel/other/avian_flu_airlines_cleaning_update_120505.htm

Kentucky Department of Tourism -http://travel.ky.gov

Appendix 3: Protocols Developed for International Flights:

In collaboration with law enforcement authorities and other partners, public health officials and quarantine officers should develop protocols for managing ill arriving passengers identified by airplane or cruise ship personnel. The protocols should include provisions for:

- Meeting flights or ships with a reported ill passenger
- Establishing notification procedures and communication links among organizations involved in the response
- Reporting potential cases to health authorities both local and state
- Providing a medical assessment of the ill traveler and referral for evaluation and care
- Separating the ill traveler from other passengers during the initial medical assessment
- Transporting the ill traveler to a designated healthcare facility
- Identifying other ill passengers and separating them from passengers who are not sick
- Transporting and quarantining contacts, if necessary
- Enforcing isolation and quarantine, if necessary, when ill travelers or their contacts are uncooperative

Appendix 4: Isolation and Quarantine Locations:

Home isolation and quarantine: determine the situations and attendant types of monitoring that will occur for people in home isolation and quarantine

- *Self monitoring:* Patient status is monitored by the individual
- *Active monitoring:* Patient status is monitored in-person, via telephone, or other (video) methods by LHD personnel (e.g., infection control nurse, epidemiologist, regional epidemiologist)
- *Other:* Any other type of monitoring that may occur
- *Temporary quarantine:* a few days, or until the results of diagnostic test become available
- *Longer-term quarantine:* up to 10 days if a diagnosis of pandemic influenza is confirmed

Hospital and special facility: if influenza pandemic results in severe illness overwhelming the capacity of existing healthcare resources, it may become necessary to provide care at alternative sites (e.g., schools, auditoriums, conference centers, hotels). The same principles of infection control apply in these settings as in other healthcare settings.

Support for persons in isolation: essential services (e.g., food, water, sanitary needs) will be provided to persons quarantined in alternative designated sites. (Alternative means other than hospital, special facility or home)

Appendix 5: School Notification-Concerning Communicable Disease:

158.160 Notification to school by parent or guardian of child's medical condition threatening school safety- Exclusion of child with communicable disease from school-Closing of school during epidemic.

(1) A parent, legal guardian, or other person or agency responsible for a student shall notify the student's school if the student has any medical condition which is defined by the Cabinet for Health Services in administrative regulation as threatening the safety of the condition becomes known and upon each subsequent enrollment by the student in a school. The principal, guidance counselor, or other school official who has knowledge of the medical condition shall notify the student's teachers in writing of the nature of the medical condition.